## BY ORDER OF THE COMMANDER 439TH AIRLIFT WING

439TH AIRLIFT WING INSTRUCTION 21-106

7 JUNE 2016

Maintenance

FOREIGN OBJECT DAMAGE (FOD)



#### COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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This instruction implements Air Force Policy Directive (AFPD) 21-1, *Air and Space Maintenance*, Air Force Instruction (AFI) 21-101, *Aircraft and Equipment Maintenance Management* and AFI21-101\_AFRCSUP; *Aircraft and Equipment Maintenance Management*. It outlines the responsibilities and procedures for implementing an effective Foreign Object Damage (FOD) prevention program. It applies to all Westover ARB personnel working on, around, or traveling through areas near aircraft, munitions, Aerospace Ground Equipment (AGE), engines, or components thereof. Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with AFMAN 33-363, *Management of Records*, and disposed of in accordance with the Air Force Records Information Management System (AFRIMS) Records Disposition Schedule (RDS). Refer recommended changes and questions about this publication to the Office of Primary Responsibility (OPR) using the AF Form 847, *Recommendation for Change of Publication*; route AF Form 847 to 439 MXG/MXQ, 350 Hangar Avenue, Box 21, Westover Air Reserve Base, MA 01022-1771.

#### SUMMARY OF CHANGES

This document has been substantially revised and needs to be completely reviewed. Major changes include; updated FOD prevention and awareness meeting requirements (paragraph 1.2.2 and 1.3.1) Deleted paragraph 1.3.3 and incorporated it into paragraph 1.4. Changed weekly FOD walk requirement to monthly requirement and update FOD boss usage requirements (paragraph 1.4, 1.4.1, 1.4.2 and 1.4.3.) Deleted paragraph 2.1 and renumbered 2.2 to 2.1.

### 1. Responsibilities/Procedures:

- 1.1. The Airfield Manager will:
  - 1.1.1. Conduct daily runway and taxi-way checks.
  - 1.1.2. Coordinate with the Wing FOD monitor on all airfield project(s) having the potential to impact the FOD prevention program.
  - 1.1.3. Ensure weekly FOD sweeps are performed in accordance with the Airfield Sweeping Schedule ( **Attachment 2**)
- 1.2. The 439 MXG FOD monitor will:
  - 1.2.1. Provide a FOD awareness briefing to be presented at the Wing newcomers briefing.
  - 1.2.2. Assist the 439 AW/CV in convening and co-chairing a monthly FOD prevention and awareness meeting if the MAJCOM-established FOD standard is exceeded. The topics covered in the meeting will include:
    - 1.2.2.1. Westover FOD incidents since the last meeting.
    - 1.2.2.2. Cross-tell information.
    - 1.2.2.3. Sweeper schedules and status.
    - 1.2.2.4. Ongoing base projects that may impact the FOD program.
    - 1.2.2.5. Lost tool/object reports.
    - 1.2.2.6. Aircraft Dropped Object Prevention Program.
  - 1.2.3. Participate in the investigation of FOD mishaps to determine root causes and preventative measures.
  - 1.2.4. Ensure MXQ performs weekly spot-inspections of selected aircraft parking areas, aprons and MXG work centers as part of their monthly inspection schedule.
- 1.3. Squadron commanders and/or superintendents appoint squadron FOD monitors who will:
  - 1.3.1. Attend the monthly FOD prevention and awareness meetings when required.
  - 1.3.2. Report significant findings/potential issues and trends to squadron supervision and the MXG FOD monitor.
- 1.4. FOD walks are mandatory to remove FOD from ramps, runways, maintenance areas and access roads.
  - 1.4.1. MXQ will coordinate monthly FOD walks of aircraft parking areas. Squadron commanders will ensure maximum participation.
  - 1.4.2. In addition, Vacuum/magnetic sweepers, FOD Boss or sweeping by hand are highly encouraged to supplement FOD walks. AMXS will use the FOD Boss to perform sweeps of selected areas of the east ramp, north ramp and access road when required in place of the vacuum sweeper or when determined necessary by MXG and squadron FOD monitors to supplement established FOD prevention activities.

- 1.4.3. MXQ will implement the Golden Bolt Program to acknowledge superior performers in the area of FOD prevention.
- **2. Training.** All newly assigned personnel will receive a FOD awareness briefing at the newcomers briefing.
  - 2.1. Maintenance Group personnel who come into contact with AGE, Auxiliary power units (APU), Munitions, and/or aircraft will receive initial and annual FOD awareness and prevention refresher training. The training should be geared towards the individual's job responsibilities and must include vehicle operations, tool, hardware, and rag control procedures. Training will be tracked in GO81 using course code GENL 000953
- **3. Flightline Operations.** FOD is defined as "any damage to an aircraft, engine, aircraft system, component, tire, munitions, or support equipment caused by a foreign object(s) (FO) which may or may not degrade the required safety and/or operational characteristics of the aforementioned items. Personnel involved in flightline operations will be continually vigilant for Foreign Objects and Foreign Object Damage and will comply with the following:
  - 3.1. Will not wear loose fitting clothing, hats, or line badges (unless properly fastened to the person) within 50 feet of any aircraft when engines are operating.
    - 3.1.1. Will not use personal tools on the flight line or industrial work areas such as multipurpose tools, head lamps, flashlight or wear the holsters for such tools while in the flight line or work areas.
  - 3.2. Will ensure the aircraft Crew Chief accomplishes a FOD walk of the immediate aircraft parking area for the assigned aircraft at the beginning of each shift.
  - 3.3. Ensure the flight deck is FOD-free prior to aircrew show times.
  - 3.4. Perform a FOD inspection of the parking location prior to performing engine runs, aircraft towing operations or the block-in/block-out of an aircraft.
  - 3.5. Ensure that all dropped or missing items are recovered or accounted for immediately; treat all items as lost until recovered or accounted for. Items that cannot be immediately found will be reported to supervision as lost and a lost tool/object report will be initiated in accordance with 439 AWI 21-105, *Consolidated Tool Control Program*.
- **4. FOD Incident Reporting and Data Tracking.** Anyone discovering confirmed or suspected FOD is required to report it immediately to the MOC/Maintenance Control Function, they will in turn notify the 439 MXG/MXQ office. 439 MXG/MXQ, in conjunction with the 439 MXG/CC will determine the need to impound aircraft, engines or equipment subjected to FOD damage. 439 MXG/MXQ will create and forward the necessary reports and assist in the incident investigation (as required.)
- **5. Dropped Object Prevention Program:** It is the responsibility of all maintenance personnel to ensure panels, tires, antennas and any other items installed on the exterior of the aircraft are properly fastened and secured. All missing items must be promptly reported to supervision and 439 MXG/MXQ.

JAY D. JENSEN, COL, USAFR Commander

### **Attachment 1**

### GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

# References

AFPD 21-1, Air and Space Maintenance, 25 February 2003

AFI 21-101 AFRC SUP 1, Aircraft and Equipment Maintenance Management, 24 August 2015

AFMAN 33-363, Management of Records, 1 March 2008

439 AWI 21-105, Consolidated Tool Control Program, 31 January 2008

### Forms Adopted

AF Form 847, Recommendation for Change of Publication, 22 September 2009

### **Attachment 2**

# AIRFIELD SWEEPING SCHEDULE

**A2.1.** Monday: East Ramp (E9 – E16), Taxiway "G" from Taxiway "L" to Taxiway "N", and the Fire Access Rd Tuesday: East Ramp (E1 – E8), Taxiway "T" Wednesday: PAD05, PAD23, PAD33, Compass Rose, Taxiway "N" Thursday: Taxiways "L, Y, F, R," NORTH RAMP, and Pad 19 Friday, Saturday and Sunday: None